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10/609,276	06/27/2003	Gregory James Newell	BAC-0029	8307

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John R. Flanagan
P. O. Box 2629
Eugene, OR 97402

EXAMINER	
MITCHELL, JOHN-PAUL N	
ART UNIT	PAPER NUMBER
3652	
MAIL DATE	DELIVERY MODE
09/03/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/609,276	NEWELL, GREGORY JAMES	
	Examiner	Art Unit	
	John-Paul N. Mitchell	3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 June 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 May 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. Applicant's abstract is 170 words in length. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 216, 84. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any

amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "32" and "72" have both been used to designate “forward [support] roller.” Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to because a 1” margin is required on drawing pages and label lines must be of uniform thickness. See 37 CFR 1.84, sections (g), (l), and (p). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement

drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Appropriate correction of any and all errors of the nature of those cited above is required.

Claim Objections

Claim 5 is objected to because of the following informalities: line 4 of the claim recites "means for reconfiguring chassis to enable." This could either read "a chassis" or "said chassis" with both having significant, separate meaning. Claim understood to read “said chassis.”

Claim 18 is objected to because of the following informalities: line 8 recites “reward,” which Examiner understands to be "rearward," and in line 9, "object." displays an inappropriate period.

Examiner requests appropriate correction.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 18-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to disclose enablement of a docking station, a means for docking to said station, a rechargeable power source, and how said power source might interact with the disclosed device as well as said station.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 7 recites the limitation "said pair of aft wheels" in lines 3-4 of the claim.

Claim 9 recites the limitation "said forward roller" in line 2 of the claim.

Claim 9 recites the limitation "said push/pull fitting" in line 4 of the claim.

Claim 12 recites the limitation "said pair of aft wheels" in lines 3-4 of the claim.

Claim 14 recites the limitation "said object" in line 5 of the claim.

Claim 18 recites the limitation "power source" in line 10 of the claim.

There is insufficient antecedent basis for these limitations in their respective claims. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Englund (US Patent 4,582,154). Englund discloses a moving apparatus comprising:

a chassis (Fig. 1, 3) supporting at least two rolling elements (3', 3", 2), a handle shaft (6) mounting to the chassis, a motor (1) for driving at least one of said rolling elements, and a power supply (column 1, lines 65-69), each of the rolling elements rotating about an axis, a non-interference envelope (apply lines as shown on Applicant's Fig. 5a to Englund's Fig. 1 , elements 2 and 3'), and a means for reconfiguring said chassis to enable support by rolling elements (column 2, lines 10-25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Englund (US Patent 4,582,154) in view of Romick et al. (US Patent 6,098,732). Englund discloses the moving apparatus as recited above, but fails to teach wherein a rolling element is circumscribed by a motor, nor wherein said drive roller is co-axial with an output drive shaft. Romick et al. teaches:

wherein at least one of said rolling elements (Fig. 3, 40) circumscribes and is driven by a motor (38);

wherein said motor includes an output drive shaft (56) co-axial with the drive roller (40), and a torque means (Fig. 4A, 58) for directly driving said drive roller about its rotational axis;

wherein a chassis (12) includes a cylindrical support (Fig. 3, 56), an inwardly facing flange (54) and a central aperture (proximate 56), wherein said motor is affixed to said flange and is disposed internally of said cylindrical support (Fig. 3), wherein the drive roller circumscribes said cylindrical support (Fig. 3, proximate 56) and said output drive shaft extends through said aperture and directly drives an end of said drive roller about its rotational axis (Fig. 3).

It is old and well known in the art to attach a drive means to a driven roller both directly, as in Romick et al., and indirectly via transmission, as in Englund. Both methods of driving said roller produce an expected and obvious result, and thus it would have been obvious to a person having ordinary skill in the art at the time of invention to substitute one of these equivalents for the other.

Claims 5-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Englund (US Patent 4,582,154) in view of Iles (US Patent 5,511,926). Englund teaches a moving apparatus as recited above, but fails to teach a pair of aft wheels. Iles teaches a moving vehicle with a pair of rolling elements (Fig. 1, 14A). It is old and well known that a pair of coaxial wheels can produce the same expected result, rotatably supporting a structure, as a single elongated roller, as taught by Englund, and thus substitution of equivalent parts would have been obvious to a person having ordinary skill in the art at the time of invention. Further, Englund teaches:

at least three rolling elements defining a substantially triangular profile (Fig. 1) and a means for reconfiguring said chassis to enable support by said rolling elements (column 2, lines 10-25).

Englund fails to teach wherein said chassis is separable to define a propulsion and a handling section, or a detachment means to facilitate separation and attachment of said sections. Iles teaches a propulsion (Fig. 8, proximate 13) and a handling (proximate 42) section, and a detachment means (24) to facilitate separation and attachment of said propulsion section and said handling section. At the time of

invention, it would have been obvious to a person having ordinary skill in the art to combine these teachings in order to provide a more stable means for moving the objects desired.

Englund teaches a means for repositioning a handle shaft relative to a chassis in order to vary the angular orientation of said handle shaft, but fails to teach such repositioning for pivoting about the rotational axis of a pair of aft wheels. Iles teaches a means for pivotally mounting a handle shaft effecting rotation of said handle shaft about the rotational axis of a pair of aft wheels (Fig. 3, proximate 21). At the time of invention, it would have been obvious to a person having ordinary skill in the art to combine handle shaft mounting means of Iles of that of Englund in order to provide a more convenient, repositionable handle as is common and well known in the art.

Englund further teaches a push-pull fitting (Fig. 1, 6) disposed in combination with said chassis.

Englund also teaches a detachably mounted forward roller, as any of the rolling elements are removable, along with a plethora of apertures (proximate 1, 7, 9, etc.) within said chassis. Englund teaches a push/pull fitting (6) mounted to said apertures, which provides at abutment surface (proximate 5) which can be used in an operational mode requiring an object to be linearly pushed/pulled.

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Englund (US Patent 4,582,154) in view of Iles (US Patent 5,511,926) as applied above

in claims 5-14, and further in view of Romick et al. (US Patent 6,098,732) as applied to claims 2-4 above. Romick teaches:

wherein at least one of said rolling elements (Fig. 3, 40) circumscribes and is driven by a motor (38);

wherein said motor includes an output drive shaft (56) co-axial with the drive roller (40), and a torque means (Fig. 4A, 58) for directly driving said drive roller about its rotational axis;

wherein a chassis (12) includes a cylindrical support (Fig. 3, 56), an inwardly facing flange (54) and a central aperture (proximate 56), wherein said motor is affixed to said flange and is disposed internally of said cylindrical support (Fig. 3), wherein the drive roller circumscribes said cylindrical support (Fig. 3, proximate 56) and said output drive shaft extends through said aperture and directly drives an end of said drive roller about its rotational axis (Fig. 3).

It is old and well known in the art to attach a drive means to a driven roller both directly, as in Romick et al., and indirectly via transmission, as in Englund in view of Iles. Both methods of driving said roller produce an expected and obvious result, and thus it would have been obvious to a person having ordinary skill in the art at the time of invention to substitute one of these equivalents for the other.

Conclusion

The prior art made of record, but not relied upon, is considered pertinent to applicant's disclosure, including: Newell (1986), Garner (2007), Ricciardi (1987), Cline (1982), Pearson et al. (1956), Schmitz (1974), and Hill (1947).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John-Paul N. Mitchell whose telephone number is (571) 270-5226. The examiner can normally be reached on 5/4/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saul Rodriguez can be reached on (571)272-7097. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Saúl J. Rodríguez/
Supervisory Patent Examiner, Art Unit 3652

J-PNM